

(57) Abstract: A composition comprising (A) a resin mixture consisting of (A1) from 0.5 to 50.0 % by weight, based on the sum of components A1 + A2, of an epoxidised or maleinated natural or synthetic oil, and (A2) from 50.0 to 99.5 % by weight, based on the sum of components A1 + A2, of a polymerisable or curable monomer or monomer mixture other than A1, and (B) an organophilic layer silicate obtainable by treatment of a natural or synthetic layer silicate with a swelling agent selected from sulfonium, phosphonium and ammonium compounds, but in the case where component A1 is an epoxidised oil, salts of melamine compounds and cyclic amidine compounds are excluded as ammonium compounds, is suitable for the preparation of nanocomposites having a high degree of toughness and tensile strength.